THE PSYCHOLOGY OF MODERN GERMANY[1]

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Just as it was said by Edmund Burke that one cannot indict a whole nation, so it may be rightly contended that one cannot speak of the psychology of a nation as one speaks of the psychology of an individual. Nevertheless, the course of history of a nation and its type of social structure do tend to develop and encourage certain types of mental outlook and emotional temperament among its individual members which, in the average, may express a general trend in national character, and, in times of mass movements and popular upheavals, may manifest a sort of collective personality that has its own reality and unitary effectiveness. Only in this sense does one feel justified in passing any opinion on the psychology of Germany, and, with still greater diffidence, in attempting any truly scientific study of the problem.

I. A PROBLEM IN PSYCHOPATHOLOGY

Modern Germany is to be regarded as constituting a problem in psychopathology quite as much as in psychology. I have one qualification at least for speaking on this subject, namely, that I visited Germany in my youth and came to know Germans of all types, and to like most of them as individuals, and learnt to feel attraction and admiration for much in their cultural life, especially in the domains of music and metaphysics. When I was a young undergraduate in this University of Oxford, nearly forty years ago, struggling too hard with philosophy (especially that of Hegel!) while also studying mathematics and science, and needing a rest, I went to Hanover, where I was received in the most friendly way and there learnt the language and came to realize how great was the contribution of intellectual and artistic Germany to modern civilization, and yet how different was her point of view from our own in many matters of ordinary life. As a nation she was jealous of our empire and determined to underestimate and disparage us, and ultimately to displace us, if she could. Nevertheless, as individuals, the Germans were capable of the most cordial and unprejudiced feelings towards us Englishmen. One was faced with the great problem of group mentality, and the influence of the group upon the individual—the chief psychological problem which faces us to-day.

Here it is very important to avoid too much theorizing. It is good to be clever, but it is better to be right, and if I am rather halting in my speech it is because I am anxious not to say anything which can be shown to be untrue and even ridiculous when read after

[1] A paper read before the British Psychological Society, meeting at Oxford on 9 April 1943.

the war is over. We must avoid being unduly influenced by mere propaganda. Propaganda, of course, is necessary in war-time. Nothing must be done or said to interfere with that important arm of the forces. But if we are to take a detached and scientific view, then we must put aside propaganda as far as we are able to do so.

II. A VOICE FROM A CENTURY AGO

May I place at the forefront of what I have to say a quotation from a very great German writer, Heinrich Heine, author of the most popular of all German songs, the 'Lorelei', who spent the last twenty or more years of his life as an exile in Paris because he could not endure certain characteristics of the German temperament? In 1834 Heine wrote concerning German philosophy that it was an important matter affecting the whole human race. 'Our remote descendants', he said, 'will be the first to be able to decide whether we are to praise or to blame for having first worked out our philosophy and after that our revolution.'

> The German revolution [he goes on] will not prove any milder or gentler because it was preceded by the Kantian *Kritik*, by the transcendental idealism of Fichte, or even by the philosophy of nature. These doctrines served to develop revolutionary forces that only await their time to break forth and to fill the world with terror and with awe....
>
> For if the hand of the Kantian smites strong and sure because his heart is moved by no traditional reverence, if the Fichtean courageously defies every danger because for him it simply does not exist in reality, so will the philosopher of nature be frightful in that he allies himself with the primitive powers of nature, being able to conjure up the daemonic forces of old Germanic pantheism; and then there will awake in him that old joy of battle which we find among the ancient Germans, the spirit which does not fight in order to destroy or conquer, but simply for the sake of fighting.

Heine goes on to say that the fairest merit of Christianity is that it has in some degree subdued that brutal Germanic joy of battle, though it could not destroy it; and when the cross, that restraining talisman, fell to pieces, then would break forth again the ferocity of the old combatants:

> The old stone gods will then arise from the forgotten ruins and wipe from their eyes the dust of a thousand years, and at last Thor with his giant hammer will leap aloft and he will shatter the gothic cathedrals.

The German poet warns the people of his adoption to be on their guard:

> Smile not at my counsel, at the counsel of a dreamer, who warns you against Kantians, Fichteans, and philosophers of nature. Smile not at the phantasy of one who anticipates in the realm of reality the same revolution that has taken place in the realm of intellect. The thought precedes the deed as the lightning the thunder. German thunder is of true German character; it is not very nimble and it rumbles along slowly. But come it will, and when you hear a crashing such as never before has been heard in the world's history, then know that at last the German thunderbolt has fallen. At this commotion the eagles will drop dead from the skies and the lions in the farthest wastes of Africa will bite their tails and creep into their royal lairs. There will be played in Germany a drama compared with which the French revolution will seem but an innocent idyll.

He tells the French that they have more to fear from a freed Germany than from the entire Holy Alliance with all its Croats and Cossacks. "For, in the first place, they do not love you in Germany."

> Once in a beer-cellar at Goettingen I heard a young Old-German assert that it was necessary to be revenged on France for Conradin of Hohenstaufen, whom you beheaded at Naples. Doubtless you have long since forgotten that. We, however, forget nothing. You see, then, that whenever we have a mind to quarrel with you there will be no lack of valid grounds. In any case I advise you to be on your guard.

Happen what may in Germany... be you ever armed, remain quietly at your post, your weapons in your hands. I mean it well with you, and I was seized with dismay when I heard it said lately that your Ministry proposed to disarm France.[1]

It seems only necessary to add that that was written not in 1934 but in 1834.

III. HISTORICAL INTRODUCTION

I turn now very briefly to a historical introduction to this paper. When does modern Germany begin? I think the change is very apparent to the historical eye in the time of Frederick the Great. Many people would agree with that view, even if they were not prepared to accept Macaulay's valuation of Frederick as the greatest king who has in modern times succeeded by right of birth to a throne. It was through the advances made by the army, first (though without battle) in the reign of his father, Frederick William I, and then in his own, that, so to speak, the joy of battle, as Heine calls it, returned to the Germans. They realized to the full what fighting meant and could do. All the mystical element in their nature was aroused by the heroism of their brave king facing a world in arms with practically no prospect of success, and yet holding fast to his ill-gotten gains (Silesia) throughout the seven years of war, and winning through to ultimate victory. This put the seal on their militarism and their readiness to accept regimentation to the utmost for the sake of national success.

That episode in their history left a deep impression on the German nation. By the German nation I mean primarily Prussia. It is necessary to remember that, in respect both of area and population, Prussia is nearly two-thirds of Germany. Immanuel Kant, the greatest of philosophers, was himself a Prussian, but although Heine in the extracts I have quoted is rather severe on Kant, I do not think the latter can properly be arraigned. The 'villains of the piece', however, on the philosophical side, with their doctrine of folk unity and self-sufficiency, and national self-centredness, were his one-time students, Johann Gottfried Herder and Johann Gottlieb Fichte,[2] the latter a Saxon not a Prussian. But these and other thinkers of the time, whatever their place of birth, all looked to Prussia for political inspiration, even while aspiring to a wider unity of the whole German nation, and deploring the barrack-room and parade-ground uniformity of the northern kingdom. There was an attempt at Prussian reconstruction along more liberal lines in the years 1807–13, under K. A. von Hardenberg and Karl Freiherr vom Stein (who was strongly influenced by British ideas of self-government), with Ernst Moritz Arndt as the 'publicist' of the movement, but that failed because of the innate tendency of the Germans to worship power as such, and to believe that if power succeeds it must be right. The idea that might is right lies deep in the German nature. It can be traced back to

[1] The passage from Heine appears in the original in *Deutschland* in *Sämmtliche Werke* (Hamburg, 1885, vol. VII, pp. 138–42). An excellent translation was given in the *New Statesman and Nation* (1940, vol. XIX, p. 770). The passage is given in English in full in Rohan Butler's book, *The Roots of National Socialism, 1783–1933* (Faber and Faber, 1941, pp. 284–6). Mr Butler's book is of great value, as a condensed but accurate summary of the views of outstanding German philosophers, historians and others during the past 150 years. One's sole criticism would be that it is not *fully* representative of the better side of German intellectual and political development during that period.

[2] Kant called Fichte's *Wissenschaftslehre* "a wholly untenable system" ("ein gänzlich unhaltbares System") (*Intelligenzblatt der Allgemeinen Literaturzeitung*, no. 109, 1799). Fichte's book, *Der geschlossene Handelsstaat* (*The Closed Commercial State*) (1800), was the complete antithesis of Adam Smith's *Wealth of Nations*, and contained practically all the illiberal conceptions of modern Nazi economics, such as economic self-sufficiency of the state, a blocked currency, state barter, a planned economy, living space, and cultivated nationalism. Nevertheless, Fichte was a great philosophical thinker, and so was Herder.

earlier times, but it was certainly making itself felt at the end of the eighteenth century. It was working below the surface, in the unconscious (if one must use that term), though showing itself also all too consciously.

Goethe and Schiller, into whose era, as into that of Kant, Frederick the Great survived, though he was not of it, were the great literary leaders of German thought, and Friedrich Hölderlin was the great lyrical poet of the close of that period. Goethe was a liberal and somewhat of an internationalist.[1] Schiller[2] was more nationalist in temperament and aroused the patriotic fervour of the Germans. Hölderlin, the German Pindar, worked for a cultural synthesis of Hellenism, Christianity and Germanity. It must always be remembered that at this time Germany had not yet become an integrated nation. There were upwards of three hundred petty German states in the centre of Europe, and they needed some kind of unification. That unification came about later than our own, and if we are tempted to adopt a superior air with regard to the Germans and to think that we are not like those people, we should remember that our own national synthesis occurred earlier. If we do not like the concept of *Deutschheit* (Germanity) it will be salutary to recall episodes in our own history: how Queen Elizabeth, for example, was proud to tell her people that she was "mere English" (not "merely English", as a reporter of a lecture of mine once made me say). It was the same spirit to which appeal was made by Cromwell who encouraged his followers at a difficult time by reminding them, "for we are Englishmen". The Germans were indeed showing sound psychological insight, although their psychology was instinctive, perhaps, rather than rational. They felt that the experience of *Deutschheit* and the conception of *Deutschtum* were essential if they were to become a unified nation, and they had to become a unified nation for economic as well as for other reasons.

IV. The rise of racialism

The sporadic manifestations of anti-semitism since the time of the Reformation have a connexion with this German urge towards national and folk unity. Anti-semitism in more systematic form broke out in Prussia under the influence of Von der Marwitz, the leader of the Junkers at the beginning of the nineteenth century. His reason for pursuing that policy was that he looked on the Jews as constituting a state within a state. He considered that it was impossible to have a strong state if another state with a different racial origin, different ideals and emotional attitudes were included within it. That is one of the reasons for anti-semitism, but it is a reason of which the Jew may feel proud. Anyone who sets out to break the Jews, said Nietzsche, should think twice, and three times, and then should not attempt it. Hitler has set out to do it, and he is going to be smashed. There are many reasons why he is going to be smashed, but that is one of them.

I have dwelt upon this earlier phase of German history in order to make clear how deeply implanted is racialism in the German mind. It was not Alfred Rosenberg, or intellectual lightweights like him, who brought in that conception. It was Herder and Fichte at the end of the eighteenth century, and non-Germans like Gobineau and H. S. Chamberlain later on. One must except Hegel, who was rather contemptuous of the *Volk* idea. Hegel believed in "the absoluteness of the State as such" ("die Absolutheit

[1] Goethe wrote: "How could I, to whom only culture and barbarism are matters of importance, ever have hated the French?" (To Eckermann, 14 March 1830.)

[2] It was Schiller who first wrote "World history is the world's court of judgement" ("Die Weltgeschichte ist das Weltgericht"), quoted by Hegel and often attributed to him.

des Staates an sich") and in its supreme power.[1] He held also that all its citizens should be required to belong to *a* church, "since religion is an integrating factor in the state, implanting a sense of unity in the depths of men's minds" (*Philosophy of Right*, § 270, Eng. trans. by T. M. Knox, p. 168, Oxford University Press, 1942). This reminds us that the present situation in Germany is one in which formal religion has been excluded from mundane affairs and something else set in its place. The talisman, to quote Heine again, has fallen to pieces, and the old stone gods have arisen. The exaltation of spirit which finds its natural expression in religion cannot be denied, and, if the attempt is made to do so, it will find some more primitive outlet—in the case of the individual in superstition and an increase of narcissism, and in the case of the state in a primitive tribalism and an inflation of its world claims. In either case, individual or national, it may lead to some form of megalomania, with an outburst of crude lust for power and world-domination.

That is what has been happening in Germany under the influence of a long line of eminent thinkers during the past 150 years. Here I would except Kant (who would otherwise be the first of this line), and I think that "Back to Kant" might well be again a rallying cry for philosophy. I do not say that Kant was religious in the dogmatic sense. His philosophy, indeed, aroused the declared opposition of adherents of historical Christianity. But, although he was never carried away by sentiment, he had a firm religious foundation for all his thinking. His book, *Zum Ewigen Frieden* (*Perpetual Peace*), showed that he disapproved of war, in this respect being in complete opposition to his philosophic contemporaries and successors, Herder, Fichte, Hegel,[2] Ranke, Treitschke, Lamprecht, Bernhardi, Naumann, Moeller van den Bruck, and dozens of other less distinguished thinkers.

V. 'KULTUR' AND CULTURE

Here we have also to consider the difference between *Kultur* and culture. Concerning *Kultur* much was spoken and written during the last war. As Thomas Mann, in his essay *Kultur und Sozialismus*, remarked: "In 1914 there was nothing in the world more hated, more reviled than German *Kultur*: and the fact that it was spelt with a K was to *Entente* journalists an added source of embitterment. But the unbridled animosity of the enemy world against this capital K need not surprise us...for the concept of *Kultur* stood at the heart of our war ideology, just as at the heart of the enemy's stood the politico-democratic notion of 'civilization'."[3] The idea of *Kultur* in the German mind was essentially bound up with the idea of *Volkstum*. The feeling of *Gemeinsamkeitsbewusstsein* (community consciousness) involved a certain emotional satisfaction. The nation was gregarious and showed a marked tendency towards militarism, bureaucracy and subordination to authority. It was because of this that when Hitler, Rosenberg and Goebbels called upon the German nation to develop a feeling of *Volksgemeinschaft* (folk-community) there was a ready response, and a pronounced development of national unity and

[1] The fact that Alfred Rosenberg refers to Hegel only three times in his *Mythus des zwanzigsten Jahrhunderts* (SS. 287, 525, 527), and on each occasion in a hostile and disparaging way, is significant on this point.

[2] "War has the higher significance that by its agency, as I have remarked elsewhere (*Über die wissenschaftlichen Behandlungsarten des Naturrechts*), the ethical health of peoples is preserved in their indifference to the stabilization of finite institutions; just as the blowing of the winds preserves the sea from the foulness which would be the result of a prolonged calm, so also corruption in nations would be the product of prolonged, let alone 'perpetual', peace" (*Philosophy of Right*, § 324, Eng. trans. by T. M. Knox, p. 210, Oxford University Press, 1942).

[3] *Past Masters and Other Papers* (translated by H. T. Lowe-Porter, London, Martin Secker, 1933, p. 205).

uniformity. The success of any liberal movement in Germany was thereby prevented. During the nineteenth century liberalism tried from time to time to raise its head, but it always failed. It is most depressing to read the history of Germany from that point of view. The ideas which permeated the French Revolution could never strike any deep roots in Germany. The Germans felt that those ideas were mechanical and artificial as compared with their own more organic and concrete conceptions of national life.

It is necessary to remember, too, that the art of self-mystification, and even self-deception, in history and philosophy is very prominent in the German nation. I speak from the point of view of one who owes much of what culture he possesses to the study of German sources, in addition to those of Greece and Rome. I have spent many years reading German history and philosophy as well as German psychology, partly because these studies seemed so fundamental and deep, so much more systematic, and therefore apparently so much more satisfying than our own British empiricism. All of us who were studying philosophy at Oxford at the beginning of this century had to read deeply in German philosophy if we were taking 'Greats'. I can remember the time when we were expected to read Hegel—at any rate those of us who aimed at high honours in philosophy in the Lit.Hum. School—whether we understood him or not.[1] I am grateful for my own time in Germany, which enabled me to read Kant and Hegel in the original, if not with ease—for hardly anyone can read them with ease—at all events with intelligent appreciation. But the elements of mysticism and pretentiousness in some parts of the writings of Herder, Fichte, Schelling and other lesser lights in the German philosophical firmament, could be not only intellectually confusing but also emotionally demoralizing and misleading. On the other hand, Goethe is almost an education in himself.

VI. Nietzsche and the glorification of war

There are two German words not easily translated into English: *Schadenfreude* (pleasure in another's misfortune) and *Schwärmerei* (mystical enthusiasm), which illustrate characteristic tendencies on the part of our German neighbours. One undoubted tendency of theirs is to sadism. This comes out conspicuously at times in the German character, developing into outbursts of cruelty which it is impossible to condone, excuse, or even understand. They are as irrational as they are odious. Exhibitions of cruelty in the Middle Ages are equally odious, but one can discern in them certain promptings of intelligence and idealistic purpose. Nazi cruelties are distinguished in the records of human barbarity by their complete ruthlessness. They are directed against their own people as well as against the Jews and subject races. The inculcation of insensitiveness had an apostle in Friedrich Nietzsche, to whom, nevertheless, credit must be given for his great powers of psychological analysis. His writings[2] may still be studied with profit by those who wish to understand the intellectual and emotional origins of psycho-analysis. He was no racialist—he spoke of the "mendacious race swindle"—and he was no anti-semite. But he was pro-war and anti-Christian. Here are maxims of his creation, *Zarathustra*:

> This new table, my brother, I put before you: *Become hard!*
> A man of enlightenment must be able not only to love his enemies, but to hate his friends.

[1] The mention of the art of self-mystification reminds me of the story of an examiner—not himself an Hegelian philosopher, although he had read a great deal on the subject—who said, of a candidate's answers, "Of course it is nonsense, but the question is, is it the right *kind* of nonsense?"!

[2] Especially *Jenseits von Gut und Böse* and *Zur Genealogie der Moral.*

A man must be trained for war, a woman for the relaxation of the warrior; all else is evil.

Ye should love peace as a means to new war; and the short peace more than the long. I do not exhort you to work, but to fight.

Ye say that a good cause will even sanctify war! I tell you it is a good war that sanctifies every cause.[1]

The Germans have certainly taken up those maxims. Nietzsche is the patron saint or the main inspiration of a movement of philosophical Nihilism in Germany, in whose organ—*Widerstand*—the Jüngers (Ernst and Georg Friedrich) are (or were) the leading writers.[2] It is really solid stuff, not the shallow kind of philosophizing which is to be found in Alfred Rosenberg's *Myth of the Twentieth Century* and in similar Nazi publications. When Hermann Rauschning called his chief book *Die Revolution des Nihilismus* (badly translated as *The Revolution of Destruction*), he seems to have had this influence in mind. Nihilism was not something that came with and from the Nazis, but it derived its inspiration from a parallel and more intellectual movement. If we are impressed by many of the things which Hitler said to Rauschning and others from time to time in private conversations (recorded in the latter's book, *Hitler Speaks*), we shall nevertheless find that these apparently original and sententious utterances have a familiar ring for those who are versed in Nietzsche's writings, although lacking the sparkle and style of that genius.

VII. PERSONAL SOURCES OF STUDY OF MODERN GERMANY

In Chap. VII of my book, *War and the Psychological Conditions of Peace*, on "The philosophy and psychology of the Nazi State", I have mentioned some of my personal experiences of Germany. I do not wish to recapitulate what is said in that chapter, but only to supplement it by further remarks made in the light of what I myself have seen and heard and learned. My last German visit, to Munich, took place in the winter of 1936. At that time I had an interview with Prince Rupprecht of Bavaria, who, by the way, in talking to me, never referred to Hitler by name, but only as "that man", and who told me that only 30% of the population of Munich were Nazis. It was he who advised me to read Houston Stewart Chamberlain's *Die Grundlagen des neunzehnten Jahrhunderts* (*The Foundations of the Nineteenth Century*), and I thus discovered how much Hitler owed to Chamberlain in his composition of *Mein Kampf*. Indeed, there is little that is original in *Mein Kampf* apart from Hitler's account of the rise of the Nazi movement, and of his own personal history. Almost every 'philosophical' idea in it can be discovered in earlier writings of Germans of one school or another. Hitler's one original conception is his disparaging judgement on Russia's military power and capacity for mechanical warfare, which appears in the penultimate chapter of his book. He now knows how mistaken that conception was!

Ever since 1933 I have listened to all of Hitler's broadcast speeches, as well as those of Goering, Goebbels, and other leading Nazis, and—especially since the outbreak of war—to the German broadcasts for German listeners, because they throw important light on the special psychological problem of German mentality.[3] It is the duty of anyone who is trained in psychology to study these revelations as fully as possible, with a view to the

[1] Quoted in Mr Rohan Butler's book, already referred to, p. 159.

[2] See E. Meissner, *Germany in Peril* (pp. 112–16, Oxford University Press, 1942).

[3] Since February 1943, I have each day received, and read, *Germany Day by Day* (*Deutschlandspiegel*) from the Monitoring Service Information Bureau (to which I should like to express my gratitude), which contains verbatim reports of all the more important German broadcasts and announcements, as they occur from day to day.

future. The problem is really a medico-psychological one. Germany is a sick nation, and we need to understand how she has reached the state in which she now is if we are to form a reliable opinion as to the best way of treating her later on. If we treat her in the wrong way later on it will be more than an international calamity, it will be a world crime.

VIII. The psychology of Hitler

The problem centres round the personality of Adolf Hitler, although it has a much wider scope. Hitler has identified himself with the German nation just as the Germans, in the mass, have elected, accepted, or merely tolerated him as their leader, and his mental make-up both influences and reflects the psychological characteristics of that nation. It may be noted that the three main schools in medical psychology—those which follow Freud, Jung, and Adler respectively—have their different views and explanations of Hitler's character and personality. Freudian doctrine would explain Hitler in terms of his early upbringing, his Oedipus complex, his fixation on his young mother, his hatred of, or at least his antagonism to, his elderly father (his father was 52 years older than himself and 23 years older than his mother). Under Jung's conception Hitler is to be regarded as a mediumistic 'medicine man', hypnotizing his audiences and both stimulating and representing the collective unconscious of the Germans, and, of course, the Austrians. The Adlerians would regard Hitler as a sufferer from an inferiority complex. I will discuss the other two in a moment, but the Adlerian picture is very inadequate as an explanation. It would seem to involve a misuse of terms. There is little evidence of an inferiority complex in Hitler. If we are going to talk of complexes, it is rather a superiority complex which appears in his case. Hitler and the Nazis think themselves a few inches taller than other people, because of their lack of self-criticism. I cannot find any evidence that Hitler ever suffered from a feeling of inferiority (*Minderwertigheitsgefühl*), however inferior and limited his personality may really have been. It is true that he was at a *disadvantage* during his early years, and both then and later on in his life he had to suffer much *humiliation* and *frustration*—which brought their own reactions in his mental outlook. He did not learn much at school, because he did not want to learn; he did not want to become the small official which was his father's ambition for him, he wanted to be an artist or an architect. He simply refused to study except in politics and history, and in those subjects he showed real ability. But all through he knew that he was going to become what he considered a great man, he was going to make his mark in the world. The fact that during the last war he did not rise above the rank of *Gefreiter* (lance-corporal) can be explained in terms of his particular temperament and of his social *milieu*, the social ideas and principles in the Bavarian regiment to which he belonged. He had no chance of rising higher in the army, and he had no chance of showing his own special ability (such as it was) until he came out of the army at the end of the war.

There can be little doubt that Hitler had a mother-fixation and felt antagonism towards his father.[1] His father died when he was 14. He was kept at home with a chest complaint two years later which saved him from having to go to a higher school, and so he became (or remained) his 'mother's darling' until she died, when he was 19. Then he was turned out into the world with no special qualifications. He went to Vienna and sat for the entrance examination to the University, but he failed. He tried again, took his drawings

[1] Hitler himself writes: "Ich hatte den Vater verehrt, die Mutter jedoch geliebt" (*Mein Kampf*, S. 16).

to the Rector of the University, who, however, turned them down and did not allow him even to sit for the examination this time, and so he became a lonely outcast in the Austrian capital, poor but respectable, living as best he could, under the most difficult circumstances, as he himself describes in the early pages of *Mein Kampf*.

The extraordinary thing as one reads those pages is to find so little evidence of any really human or social feeling. He does not seem to have had any friends in Vienna. He went his own lonely way and there developed his hatred and scorn and contempt for humanity. Hate seems to have been his prevailing feeling from then onwards. It was there also, in Vienna, when he was down and out, that he first became conscious of the Jewish problem and developed his own anti-Jewish feelings. His own description of this development, in Chap. II of *Mein Kampf*, and his references to the Jews in later parts of that book, indicate a serious twist in his mental make-up.

IX. A PARANOID TYPE

Hitler subsequently showed that he belonged to a particular type of personality, namely, the paranoid type. This at least is my own view, based upon a study of *Mein Kampf* and of Hitler's broadcast speeches, supplemented by facts and opinions given in various books about him. Hitler must have been born of that type, but it was developed further by the special circumstances of his youth and adolescence. People have thought and said from time to time that he must be schizophrenic. I do not think that that is so. If he had been schizophrenic he would have broken down long ago. Schizophrenia means a splitting of the mind or personality to a pronounced degree and in a special way, and first reveals itself at the time of adolescence or shortly afterwards. Its victim shows later on, as the condition gets worse, the symptoms of negativism, of fantastic and stereotyped actions, of the hearing of voices, occasional outbreaks of violence, and a general inability to sustain himself and get his living. If the illness is not arrested, complete mental breakdown ultimately occurs. There is little or no reason to think that Hitler suffers in these ways.

But he is paranoid, in the sense that he suffers from the repression or inadequate control of intense aggressiveness, associated with a warped and even deluded attitude towards certain classes of people of his environment. His aggressiveness has not adequate scope, and is painful to him, and so he *projects* it upon the people around him and considers that they are aggressive towards himself. He gets the feeling of being persecuted, he suffers from persecution mania. That indeed came to the surface in his anti-semitism, and it developed also along other lines, for example, in his hostility to Bolshevism, Freemasonry and what he considered to be secret societies. He was suspicious because he was self-centred and "on the defensive", and his paranoid tendency was increased by the conditions of his life in Vienna.[1]

X. INDICATIONS OF HYSTERIA

Hitler is also hysterical, and the combination of these two characteristics, the paranoid and the hysterical, is rather striking, and explains why at times he seems to be almost a dual personality. While schizophrenia is a deep and far-reaching division of the mind,

[1] For further discussions of the psychology of paranoia and the paranoid tendency, see my *War and the Psychological Conditions of Peace* (A. and C. Black, 1942, pp. 15, 16, 74, 78, 80–4, 108, 109, 111–17).

in hysteria there is also a division but not so profound. The division in schizophrenia is a deep-going one, with extensive disorganization of the intellectual and the emotional functions and their interrelations, whereas in hysteria the dissociation is generally in the domain of memory, with amnesia for some special group or series of past events, and/or suppression (more or less temporary) of some simple psycho-physical function or functions, such as the power of sight, hearing, walking, etc. I find definite evidence of hysterical dissociation in Hitler's own account of himself in *Mein Kampf* (on pp. 220, 221, 223 in the German edition). He explains how he was poisoned by mustard gas in October 1918 at Wervick, near Ypres, and became blind, with intense pain in his eyes. He went sick and eventually reached the Pasewalk hospital in East Prussia and there, a month later, he learned that Germany had lost the war. He describes his own feelings on receiving that intelligence: "While darkness again settled in my eyes I fumbled and stumbled my way back to my ward."[1] That means that under the shock of the bad news he *again* lost his sight after having regained it. He had already got over the main physical effect of the mustard gas and that second loss of sight must have been an hysterical one.

I am told from several sources that a certain German professor, a leading neurologist, treated Hitler, while he was a lance-corporal in the army, for hysterical blindness and tremor. What truth there is in this story I cannot say, but I can say that Hitler's own description of his temporary blindness at the time of the armistice indicates its hysterical nature (at least in part). Of course the incident does Hitler credit, as evidence of his deep love for Germany and his concern for her military prestige.

Other evidence of Hitler's hysterical tendency was given to me by Mr Neville Chamberlain when he saw me in his room in the House of Commons on 14 February 1939, some months after his visits to Berchtesgaden, Godesberg, and Munich, and talked to me for an hour of his experience. His impression of Hitler was that in discussion the latter concentrated on one thing at a time to the exclusion of everything else; it was as if, in Mr Chamberlain's own phrase, he "wore blinkers". Then he would transfer his attention to something else, on which his views were perhaps in contradiction to what had just gone before, and again he would be oblivious to all besides.[2]

Hitler is no philosopher, he has no conception of what truth really is. He knows what a lie is and is always ready to use a lie, if it suits his purpose, but he takes no interest in *ideas as such* in the way that philosophers think of ideas, as having reference to fundamental truth and to concepts which can be used in working out the truth. If one could press him in argument one would probably find him to be a pragmatist; and I may recall to you the Frenchman's definition of pragmatism as "not a philosophy, but a way of trying to do without philosophy". Hitler uses ideas, just as he uses any other psychological phenomena, as means to an end, the end being power, power for himself and power for Germany, with which he identifies himself.

[1] "Während es mir um die Augen wieder schwarz ward, tastete und taumelte ich zum Schlafsaal zurück" (*Mein Kampf*, S. 223).

[2] Cf. Konrad Heiden, *Ein Mann Gegen Europa*: "It is foolish to try to pin Hitler down to a formula, for he will certainly never be aware of self-contradictions. Always speaking as the circumstances demand, he will always think that he has been consistent" (English translation, *One Man Against Europe*, Penguin Special, 1939, p. 29).

XI. THE COMPLETE CYNIC

In Austria he identified himself with the Austro-Germans, showing great hostility towards the Jews, the Slavs, the Czechs, and other inhabitants of Vienna. His eyes were always turned towards Germany, and his ideal—if one can use the word ideal in speaking of such a personality—was Prussia. It was to Prussia that he looked with intense admiration and respect. He had taken a great interest when young in accounts of the Franco-Prussian war and in Bismarck's policy afterwards. On the political side he was an enthusiastic follower of Bismarck and of Napoleon before him, and played power politics. If you read C. G. Robertson's *Bismarck*, or the short summary in J. A. Spender's *Fifty Years of Europe*, you will see how ruthless Bismarck was in fighting for the unification and the ever-increasing power of Germany and using war and the threat of war as an instrument of policy,[1] following Clausewitz, who defined war as "only a continuation of State policy by other means".

Hitler just linked up with that tradition. Although the rest of the world had moved on in thought to a higher plane of civilization, Hitler would have none of it. He had become a complete opportunist in political affairs and a cynic as regards human nature, apart from a superficial sentimentality and a romantic overestimation of the German race and character. He believed in the aristocracy of force—that as some were stronger than others, the stronger should rule and the masses just be driven cattle, to be deceived and used to the utmost. His idea that the Jewish race was distinct from the German race and was its enemy and the enemy of all mankind was linked up also with his conception of Bolshevism as a mainly Jewish conspiracy to achieve world-domination. His mental state was one of complete delusion in this respect, which fitted the definition which E. Kraepelin gave of paranoia, viz. "the insidious development, following from inner causes, of a lasting unshakable delusional system, which proceeds with complete preservation of clearness in thinking, willing, and acting" ("die aus inneren Ursachen erfolgende, schleichende Entwicklung eines dauernden, unerschütterlichen Wahnsystems, das mit volkommener Erhaltung der Klarheit im Denken, Wollen und Handlen einhergeht"). Hitler is a paranoid personality, and *Mein Kampf* is the 'book of words' of his delusional system, so far as his attitude towards Bolshevism and the Jews is concerned. If one may judge by recent broadcasts, many of the leading Nazis have become temporarily paranoid also, and the behaviour of the German nation strongly suggests a collective paranoia. Hitler is an obsessed personality, fanatically fixed on his own narrow lines of thought, feeling and action. Indeed, the word *Fanatismus* (fanaticism), spoken with approval and emphasis, appears in practically every speech that he makes.

XII. A BIG STEP BACKWARDS

The above analysis must be taken in conjunction with Hitler's complete rejection of any feelings of mercy or kindliness, much less of idealism or of a general philosophic attitude towards life. Hitler's own definition of idealism (*Idealismus*) is "merely the capacity for self-sacrifice of the individual for the totality" ("nur die Aufopferungsfähigkeit des einzelnen für die Gesamtheit", *Mein Kampf*, S. 327). Hitler does not know what truth is, nor does he care or want to know; he merely wants power, and the whole Nazi movement

[1] Bismarck defined politics as "die Kunst des Möglichen", "the art of the possible".

is one towards greater and greater power. Indeed, one may regard this period of history from the nineteen-twenties until now as a psycho-analysis of Europe and of the whole world, uncovering the springs of action, lowering the polite defence mechanisms, revealing in its starkness the power impulse, *der Wille zur Macht*. It is a return to the primitive. In primitive times this impulse made itself felt in the struggle for existence, in natural selection, in the survival of the fittest, in biological development, but in later times co-operation rather than competition has been acknowledged as the way towards man's chief good, and under this kindlier feeling man has risen to a higher level of mental existence.

But Hitler and the Nazis have stepped back to the primitive. They have stepped back a very long way, more or less to pre-Christian times, but because of modern weapons the cruelty they can perpetrate and the suffering they can cause is infinitely greater than that of any ancient pagan community. Hitler seems to have no conception at all—I will not say of compromise, because compromise is generally rather weak, but—of the co-operative method of arriving at the solution of a problem. He says in *Mein Kampf* that he does not believe in making common cause with any other movement working along lines and for objects similar to his own. He thinks it better that issues should be fought out to a finish, according to the biological principles of struggle for existence and natural selection, rather than be brought to the test of argument and reason, with the possibility of reconciliation (*Mein Kampf*, SS. 570, 571). Strife with him is something ultimate, which can never be transcended. He has never learned in public life, as most of us have learned in our private lives, to resolve his conflicts by transcending them and rising to a higher synthesis which will allow whatever is good in both the opposing sides to be established. In that way rival energies, instead of neutralizing one another, rise together to a joint higher result. But that is not Hitler's way.

This better way could have been followed in the present world conflict. Other nations were ready to meet Germany as far as possible, and no doubt in Germany itself there were many who were ready to co-operate with the rest of the world. I found that to be so when I was in Munich in 1936, meeting and talking with important people. The desire to come to an agreement was very strong among the educated classes. But Hitler intended to have war after gaining as much as possible by the mere threat of war. I own that I cannot understand the attitude of some of the German psychiatrists towards this new phenomenon in their midst. Could they not have sounded a warning, or at least discreetly indicated the possibility of dangers ahead? When I visited Professor Oswald Bumke at the Kraepelinische Klinik in Munich in 1936, I saw on the wall behind his head the picture of one who may yet be regarded as the greatest paranoiac in history, or at least the most paranoid ruler of modern times. Hitler could possibly have been dealt with in those earlier years. But it is all too probable that many leading Germans were fully aware of what he was like, and thought to use him for their own purposes. A prominent literary man in Munich told me that if it was known that I was a mental specialist the authorities would not dream of letting me meet Hitler.

XIII. Helpless Germany

It was with special interest that I listened in, on 9 October 1938, to Hitler's Saarbrücken speech. I remember that Sunday well. It was just after 'Munich', and Hitler was in an exalted and aggressive mood. It was quite clear that 'Munich' had baulked him of his

full warlike intentions. He was not bluffing then. He would have marched into Czechoslovakia.[1] Anyone who reads the Government papers on the causes of the war, or what Sir Nevile Henderson has written on the immediate pre-war events, must realize that at that time nothing could have been done with Hitler. By that time he had swept the mass-mind of Germany along with him, and the more independent-minded men who stood out against him had been gathered into his terrible concentration camps. He was also getting the special organization of the Gestapo to work, one of the more recent features of which is an extraordinary duplication of control. The Gestapo is said to have a super-Gestapo, the members of which are not in uniform and belong to every walk in life from the lowest to the highest, unknown to one another and all reporting to one man at the centre of the spider's web, the 'one-man system' (*das Ein-Mann System*) as it is called. This must have a deadly effect upon the good elements in Germany, which have no possibility of revolt as the power which holds them in thrall is intensified more and more. After the purge of 30 June 1934, the army was brought under Hitler's control by an extension of the same system.

There are three distinct parts of the German nation—*die Partei*, *die Wehrmacht* (the armed forces), and *das Volk*. The S.A. was deprived of most of its effectiveness in 1941, and now there is only the S.S. in essential relationship to *die Partei*, all of whom are volunteers, specially selected and trained, thoroughly hardened to their job, and absolutely ruthless, and in control of the party, the army, and the people alike. Hitler's latest proclamation of 24 February 1943, was a very striking one in this respect, namely, that for the first time he referred to *die Partei*, whereas before he was always talking about the nation and the people (*das Volk*). It is the Party now, in his eyes, which is going to hold out by holding down the nation, "meeting terror with ten-fold terror", etc. In the nation itself he seems to have lost faith. He knows that the failure at Stalingrad and the destruction of the Sixth Army could not be kept from the people. He knows what effect it will have upon them, and Goebbels's propaganda is now directed to telling the people that they are just fighting for their lives, that they must go on fighting or be annihilated. Thus the people in this country who talk about annihilating the Germans are playing into Goebbels's hands. Our policy should rather be to endeavour to split the Germans, to drive wedges between the party, the army, and the nation.

XIV. THE CULT OF WOTAN

I mentioned earlier the theory of C. G. Jung in terms of the collective unconscious. Jung wrote an article in a Swiss journal in 1936,[2] in which he set out the theory that Hitler is like the 'medicine man' of certain primitive tribes, he gets hold of the unconscious of his hearers, stirs them, and arouses their primitive passions. He recalls or stimulates the 'archetype' of the German nation dating back to pre-Christian times, to the time of the cult of Wotan, thus rousing the *furor teutonicus* once again. No doubt there is an element of truth in this theory. It is true—and this was Freud's view—that when an orator moves an audience he produces an emotional link not only between himself and his hearers but between the hearers themselves, so that the whole audience becomes one

[1] See Konrad Heiden, *Ein Mann Gegen Europa* (Eng. trans. pp. 263, 264), for a similar view of Hitler's mind at that time. "If there was any bluffing in the summer of 1938, it was certainly not on his [Hitler's] side" (p. 264).

[2] C. G. Jung, 'Wotan', *Neue Schweizer Rundschau* (March 1936).

unit, sometimes acting at a more primitive level. It is interesting, however, to notice that Goebbels is now endeavouring to evoke the primitive teutonic spirit as expressed in the saga of *Das Nibelungenlied*. This saga did not become generally known to the German people until 1807, just after Prussia had met her great defeat at Jena. The story was then taken up by the educated middle classes who regarded it as a poetical inspiration for the nation, similar to the *Odyssey* and *Iliad* among the Greeks, something typically German. But some leading Germans have protested against that comparison. One of them (Voss) said that to compare the *Nibelungenlied* to the *Iliad* was like comparing a pigsty to a palace, and Goethe, after first taking an interest in the saga, dismissed it almost with contempt. It was left to Wagner to make the story widely known and emotionally acceptable on the musical plane. But as an inspiration it is of doubtful value. Indeed, the story of Hagen who compasses the death of Siegfried, and of Kriemhild who plots her horrible vengeance, can be read as a portent of doom, and the Nazis' recent preoccupation with the saga must be anything but encouraging for the German people. It suggests a psychological compulsion in their own minds.

An idea with which Hitler, Goebbels and other Nazis make great play is that of *Schicksal*, or Fate. It has a dramatic and mystical quality which seems to exert a special influence upon the Germans, whose past defeats and disappointments have put them in need of some uplifting conception, reconciling them to their present misfortunes with the suggestion of some great mission in world history to which they are specially called and in which they will receive the special notice and support of Providence (*die Vorsehung*), if only they "endure to the end" (*durchhalten*).

XV. The rise of National Socialism in Germany

A fairly matter-of-fact explanation of the rise of Nazism is possible. Consider what has happened in Germany during the last generation. When they lost the last war it came as a tremendous shock to them. They became hysterical and slightly dissociated. For a long time, of course, they had been our rivals. Before the last war they had wanted a 'place in the sun', they were conscious of their own merits and achievements. And at the Armistice they felt that they had been tricked. The general German public was given the (completely false) impression that there had been "a stab in the back" ("ein Dolchstoss im Rücken"), that they had not really lost the war, and they felt that they had it in them to recover. In the great misfortunes of that period, with inflation and other miseries, they felt humiliated (but not inferior) and lost their bearings. The younger among them tried to build up their own lives, but they had no chance. Officers who returned from the army found no jobs waiting for them at all. They had no chance of special training, no place apparently in the new order (or disorder). They never had any faith in the Weimar Constitution. They were waiting for a leader to arise who would claim their real allegiance. Thus the material was ready shaped for the private army which Hitler and his followers developed. The leadership principle (*das Führerprinzip*), with its formula of "Authority of every leader downwards and responsibility upwards" ("Autorität jedes Führers nach unten und Verantwortlichkeit nach oben", *Mein Kampf*, S. 501), gave peculiar strength to this organization, like a conical framework of steel spreading downwards from Hitler through the whole German nation. It was a military principle, dating from the time of the great von Moltke, and it has made the whole nation into one huge army. Hitler's book and Alfred Rosenberg's *Mythus des zwanzigsten Jahrhunderts* (*Myth of the Twentieth Century*)

represent the corpus of doctrine behind the movement. The Nazis regard Rosenberg as the profound thinker of the party. His book had sold half a million copies by 1937. My own edition, obtained in that year, is marked 573,000. But there is little depth or originality in it for anyone versed in the history of German philosophy. People bought it and read it, partly because they were expected to read it and partly because their wits did not enable them to appreciate anything better. They had ceased to read the old German philosophers or to understand them. Indeed, one of the saddest things about this whole business is the lack, not so much of moral feeling, although that is serious enough, as of real thinking. The case of Hitler is still worse. I myself have read *Mein Kampf* through five times in the original, with a psychological interest, in order to ascertain the nature of Hitler's mind, and I can honestly say that in that book I can find no *original* contribution whatever to positive thought. None of the ideas are original, apart from his ideas on Russia, and these have proved to be completely mistaken. Hitler has not developed. As is shown conclusively by his speeches, his mind 'stays put', his speeches are simply repetitive. The same ten ideas or thereabouts come into every speech, there is no development at all. No one who was not pathological or mentally arrested could have failed to show some mental development during those years of rise to power, but Hitler remains to all intents and purposes a human gramophone, going on and on and on. His *Heldengedenktag* (Heroes Commemoration Day) speech on Sunday, 21 March 1943, to which I listened, seemed to me to indicate a phase of depression and mental decline.

We come again to the real meaning of the Nazi movement. It was a movement for the rearmament of Germany and for enabling Germany to have a second round in her struggle for world power. Everything was done with that end in view, and certainly since the Nazis came to power in 1933 (with the support of the army and big business) no one who has had any contact at all with Germany can have felt doubt on the subject.

At the time of the Disarmament Conference, the leading figure in which was our own Arthur Henderson, to whom the Nobel Peace Prize was awarded, it was perfectly clear that there could be no question of disarmament with Germany in her then mood. A mass of information was coming to us from the other side, and the surprising thing is that apparently little use could be made of it. By 1938—the year of Munich—it was too late. I hold the view that Mr Neville Chamberlain could not have done anything other than he did *at that time*. If we had grasped the nettle in 1934 or 1935 it would have been different, but after 1935 the situation became impossible. By then, like a bolting horse, Germany had the bit between her teeth.

XVI. A SICK NATION

We are right in regarding Germany as a sick nation. She has had an attack of mania, preceded by a phase of deep depression. She has been demoralized with self-pity and feelings of persecution. We can only hope that the unconscious of individual Germans may be reached and some sort of psycho-catharsis administered. They may not prove so intractable as some people think. As they regain their sanity they will understand in the pale to-morrow what they have done. What can we do with the Germans? We cannot exterminate them, even if, in a spirit of madness, we wished to do so. They will have to be re-educated, but I feel very sceptical of any plan of sending educators from England and America. If I understand Germany the implied insult would make any such plan utterly worthless. Germany can only be re-educated from within. But there are plenty

of good Germans who have been deprived of all power up to now and who will be able to play their part in the reformation and re-education of Germany after the war. Hitler said: "There are only a hundred thousand intellectuals, we need not take the slightest notice of them. We have got seventy million others"—or words to that effect. A more absurd miscalculation of forces was never made. On the question of punishment it is always difficult, of course, to know where to draw the line between the really guilty and those who have been compelled. Perhaps a line might be drawn between the S.S., who are all volunteers, and the rest of the people. Punishment has no meaning at all if it is merely vindictive. A start at re-education might possibly be made with the prisoners of war who are in England and elsewhere. I cannot subscribe to the view that the majority of the Germans are devils; they are for the most part misled, deceived, and very largely helpless. That the qualities which we have come to associate with the German character are not fundamentally racial is shown by the fact that a German-born who has lived in England for some years will develop the English outlook, and conversely, an Englishman who has been brought up in Germany will develop the German point of view. The most outstanding example of the latter was Houston Stewart Chamberlain. Nevertheless, the cumulative effect of history within the nation, the interaction of philosophical, political and economic conceptions built up by the thinkers of the nation, and the interplay of psychological forces at any given time produce a 'psychological field of force' within which the individual becomes orientated and conditioned in very definite ways. This is the *real* psychological problem of the German nation.[1]

We can help the birth of a new nation by, so to speak, holding the ring, giving the better minds in Germany a chance of making themselves felt, and preventing re-armament—which does not mean merely a ban on the conscription of armies or the assembling of air squadrons, but the prevention of the organization of industry for purposes of war. Sir Robert Robinson of Oxford has made the useful suggestion that the building of factories for nitrates should be prohibited so that no explosives could be manufactured. We can help, too, by our own policy and demeanour, endeavouring to show how evil a thing is racial hatred and how by human co-operation we may also achieve mutual understanding. We should try to speak in war-time in such a way that if our words are quoted after the war is over we shall not be ashamed of them. It is also very important to understand history. No one should publish his views on the psychology of Germany unless he has made himself acquainted with the history of that nation. The history of Prussia from Frederick the Great onwards is most enlightening in any study of the psychological reactions of Germany at the present time. Hitler, himself a Prussian by sympathy (*Wahlpreusse*), though an Austrian by birth, sold Germany to Prussia, or to Prussian militarism, and the echoes of that transaction will not soon die away.

XVII. Conclusion

The wheel thus comes full circle, and we may summarize the general argument of our discourse as follows:

Modern Germany underwent a psychological transformation after the defeat of 1918, regressing to the militarism of Prussia and to the power politics of Frederick the Great

[1] As Goethe said: "I have often felt a bitter pang at the thought of the German people, so estimable as individuals, so wretched in the whole" (quoted from Emil Ludwig, *The Germans*, Hamish Hamilton, London, 1942, p. 192).

and Bismarck. Nationalism was deliberately fostered and intensified, in reaction to Communism and alleged international Jewry. Adolf Hitler rose to power on this wave of primitive reaction, helped by the military and by big business, and was rapturously accepted by the mass-mind of the nation. Mutual interaction between the leader and the led brought about a unification of the nation at a primitive level, with liberation and encouragement of a sadistic aggressiveness which has horrified the entire civilized world. The psychology of the group mind is important here, especially as regards what J. G. Herder and Alfred Rosenberg call *Gemeinsamkeitsbewusstsein* and what Hitler so frequently refers to as *Volksgemeinschaft.*

Hitler's *Mein Kampf* and Alfred Rosenberg's *Mythus des zwanzigsten Jahrhunderts* epitomize the psychology and philosophy of the Nazi movement. The hysterical and paranoid tendencies that are so manifest in Hitler have their counterpart in the reactions of the entire nation, and the post-war treatment of Germany should be adjusted to these psycho-pathological facts. But the deliberate cruelty of the police and the terrorism of the spy system call for condign punishment. The later stages of this war will bring retribution and stern re-education to the mass of the German nation, whatever post-war measures may also be applied.

THE PROBLEM CHILD AND HIS ENVIRONMENT

By H. BANISTER and M. RAVDEN, *From the Child Guidance Clinic, Cambridge*

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I. Preliminary

The following is an analysis of some of the data of 112 children who were examined at the Cambridge Child Guidance Clinic between November 1941 and December 1942 inclusive, and of some of their environmental influences and conditions.

II. The children

The children included boys and girls from the Borough and County of Cambridge, and from the Isle of Ely, both residents and evacuees. Sixty-seven normally lived in the area, forty-five were evacuees. The proportion of evacuees was high.

The reasons would seem to be: (*a*) that an evacuee has a higher nuisance value than a child in his own home; (*b*) that evacuation itself is a factor in making life more difficult; and (*c*) that, possibly, children who were found to be giving trouble at home were less likely to be taken back to London when the air raids were over than those who were happily settled in their home environment.

There was also a larger proportion of boys than girls: 81 boys to 31 girls. It has been suggested that the reason for the preponderance of boys is that boys, if they find life difficult, give more trouble to adults, that they are responsible for most of the stealing and are more 'beyond control' and aggressive and generally unruly than girls. But if all such cases are excluded, and the remainder who suffer from various other difficulties, which we may provisionally classify as 'nervous' and 'backward', are alone considered, the numbers are 38 boys and 16 girls. Excluding again the enuretics, of whom there are more boys than girls, the number of boys is still greater—28 boys and 14 girls.

This is an interesting point and obviously calls for further inquiry if, as seems probable, somewhat similar figures are found at other clinics, for the number of women who break down in later life is greater than the number of men. In the Cambridge Mental Hospital in December 1942 the proportion was 3 women to 2 men; and exactly the same proportion was found at Penshurst, according to the data given in T. A. Ross's *Prognosis in the Neuroses* (Cambridge University Press, 1936). Whether the reason for the discrepancy is that psychological difficulties arise later in life and are then more serious with women than with men, or whether it is that children are sent to the clinic chiefly because of their nuisance value, so that many girls, who are finding life difficult but who are giving comparatively little trouble to adults as compared with the boys, are allowed to drag on through their school days without assistance, or whether there is some other reason, is not evident. Further inquiry on this point is urgently necessary.

III. Symptoms

For the purposes of this inquiry the reason given for referring the child to the clinic is taken as his symptom. There is probably no child who has only one symptom: as a rule there is a group of four or five symptoms, all of which may not come to light till the child has been to the clinic two or three times; but there is usually one symptom which has stood out, or which has determined his being referred, though it may not be the most serious one.

The symptoms fall naturally into four main groups:

Group 1. Delinquent, including stealing, pilfering and lying.

Group 2. Aggressive, including 'beyond control', destructiveness, tempers, etc.

Group 3. Nervous, including fears, restlessness, unhappiness, tics, enuresis and faecal incontinence, speech, feeding and sex difficulties, etc.

Group 4. Backward, often with dreaminess, lack of concentration, sulkiness and stupidity.

The numbers in these various groups are:

	(1) Delinquent	(2) Aggressive	(3) Nervous	(4) Backward	(5) Total
Boys	21	22	30	8	81
Girls	6	9	11	5	31
Total	27	31	41	13	112

IV. Type of home

It is obvious that the home may be a factor determining the incidence of difficulty, and that this influence may be considered from many points of view. Here the only factors considered are whether or no the home is one with both parents alive and living in harmony together. The homes are classified as follows:

Class A. Accord. Both parents alive and living amicably together.

Class B. Discord. Both parents alive and living together, but with evidence of discord.

Class C. One parent dead.

Class D. Other broken homes. Home broken by divorce, separation, desertion, or child adopted or in an institution, sometimes both parents being dead, and often with no information about the parents being available.

It is obvious that this classification is not always exact. It is not always easy to tell whether the parents are living in accord or not, and in any case it is difficult to say precisely where the line between accord and discord should be drawn. But, allowing for the difficulties, the classification is of value and of significance.

The numbers in the different classes of home are:

Class A (Accord)	52
Class B (Discord)	15
Class C (One parent dead) ...	15
Class D (Other broken homes) ...	30

The numbers of boys and girls from the different classes of homes are:

	A Accord	B Discord	C One parent dead	D Other broken homes	Total
Boys	36	10	11	24	81
Girls	16	5	4	6	31
Total	52	15	15	30	112

It will be seen that proportionately more girls come from class A (Accord) and more boys from class D (Other broken homes).

V. Type of home and symptom

Turning now to a consideration of the relation between the symptom and the class of home we get the data shown in Table 1.

Table 1

Symptom	Class of home: A Accord	B Discord	C One parent dead	D Other broken homes	Total
Group 1. Delinquent	5	0	6	16	27
Group 2. Aggressive	11	7	4	9	31
Group 3. Nervous	26	6	4	5	41
Group 4. Backward	10	2	1	0	13
Total	52	15	15	30	112

Nervous symptoms, group 3, are largely correlated with Accord, class A, and Delinquency, group 1, with Other broken homes, class D. It may be surmised that the child in an Accord home is liable to be overprotected, fussed over, and prevented from doing things for himself, and so to become nervous; and that the child who has never known his parents or whose home has been such that one or other parent has deserted the family or been divorced, steals because he lacks security or because he feels the need for love and affection, for something of value which has never been his, and that, in consequence, he is compelled to steal. Yet, on the other hand, it may be that there is some inherited factor to which the anti-social behaviour is due. Until further evidence is forthcoming, it is not justifiable to draw these conclusions; but some evidence which would seem to bear out the surmises is forthcoming, and is given below (§§ VI–VIII).

VI. Overprotection

There are nineteen cases in which there was definite evidence of excessive anxiety on the part of one or both parents for their child's welfare.

The distribution of these cases is shown in Table 2.

Table 2

Symptom	Class of home: A Accord	B Discord	C One parent dead	D Other broken homes	Total
Group 1. Delinquent	—	—	—	—	—
Group 2. Aggressive	3	1	—	1	5
Group 3. Nervous	8	2	1	—	11
Group 4. Backward	1	1	1	—	3
Total	12	4	2	1	19

Overprotection occurs in twelve Accord homes, and the symptoms of eight of these twelve children fall into group 3, Nervous, which goes to substantiate the surmise that overprotection is one factor tending to produce nervousness. Not a single child who was overprotected was a delinquent, though, as a matter of chance, two would have been expected in this group.

VII. Lack of affection

The data for lack of affection may also not be very exact, especially with regard to the evacuees, but it would seem to be significant. The evidence taken as indicating lack of affection for evacuee children was (*a*) direct, from those who knew the parents; (*b*) indirect,

from the foster parents, who frequently complained about the callousness of the parents; combined with (*c*) the infrequency of letters and the fewness of visits; and (*d*) from the child's own reactions to questions about his parents.

There were forty cases in which lack of affection is recorded. The distribution of these cases is shown in Table 3.

Table 3

	Class of home				
Symptoms	A Accord	B Discord	C One parent dead	D Other broken homes	Total
Group 1. Delinquent	2	—	3	12	17
Group 2. Aggressive	3	2	2	5	12
Group 3. Nervous	5	1	1	4	11
Group 4. Backward	—	—	—	—	—
Total	10	3	6	21	40

Lack of affection in an Accord home is, it will be seen, largely connected with nervousness, and in Other broken homes with delinquency.

VIII. Unsatisfactory discipline

Unsatisfactory discipline includes harshness and severity, and what is equally unsatisfactory, uncertainty of parental reaction, threats which are not put into execution, etc. There was evidence of unsatisfactory discipline in seventy-four cases, i.e. in over 66%. This would seem to indicate that unsatisfactory discipline is one of the chief factors in causing difficulty. The distribution of these cases is shown in Table 4.

Table 4

	Class of home				
Symptoms	A Accord	B Discord	C One parent dead	D Other broken homes	Total
Group 1. Delinquent	4	—	6	9	19
Group 2. Aggressive	4	7	4	4	19
Group 3. Nervous	14	6	3	3	26
Group 4. Backward	7	2	1	—	10
Total	29	15	14	16	74

It will be seen that unsatisfactory discipline is connected with nervousness if it is found in an Accord home and with delinquency if the child is from an Other broken home.

IX. Size of family and jealousy of siblings

Twenty-five of the children were 'only' children. This may be a high proportion, but as no figures for the total population of the area are available nothing further can be said.

The distribution of all the children and of 'only' children among the different classes of homes is shown in Table 5.

Table 5

	Class of home				
Homes	A Accord	B Discord	C One parent dead	D Other broken homes	Total
Total no. of children	52	15	15	30	112
No. of 'only' children	6	5	3	11	25

The highest proportionate number of 'only' children is found in families broken by desertion, etc., the Discord home being a close second. The lowest proportion is in the Accord home.

The sizes of the families in the various classes of home are shown in Table 6.

Table 6

No. of children in home	Class of home: A Accord	B Discord	C One parent dead	D Other broken homes	Total
1	6	5	3	11	25
2	20	4	5	8	37
3	12	3	2	2	19
4 and over	14	3	5	9	31
Total no. of homes	52	15	15	30	112

It will be seen that eighty-seven of the children had one or more siblings. Of these fifteen only gave evidence of jealousy, seven were jealous of an older child, and seven of a younger child, while one was jealous of both an older and younger sibling. The number of children with older siblings was fifty-six, with younger siblings sixty-four, and with both younger and older thirty.

The distribution of the fifteen children who exhibited jealousy according to Home and Symptom is shown in Table 7.

Table 7

Symptom	Class of home: A Accord	B Discord	C One parent dead	D Other broken homes	Total
Group 1. Delinquent	1 (α)	—	—	—	1
Group 2. Aggressive	4 (α)	1	—	1	6
Group 3. Nervous	4 (β)	1	—	1	6
Group 4. Backward	2 (β)	—	—	—	2
Total	11	2	—	2	15

(α) = All boys. (β) = All girls.

The jealousy symptom would appear to be largely confined to the Accord home, and is connected with stealing (group 1) and aggressiveness with boys, and with nervousness and backwardness with girls. The numbers are admittedly small, but the indication of the sex differences in the symptoms associated with jealousy may be worth further inquiry.

X. Age factor

The ages of 10 and 11 appear to be the most difficult years: over a third of the children fall in this age group. The variation of symptom with age is shown in Table 8.

Table 8

Age	Symptom: Group 1 Delinquent	Group 2 Aggressive	Group 3 Nervous	Group 4 Backward	Total
5 and under	—	3	7	—	10
6 and 7	1	8	6	1	16
8 and 9	4	7	10	3	24
10 and 11	13	8	11	6	38
12 and 13	8	5	7	2	22
14 and over	1	—	—	1	2
Total	27	31	41	13	112

It will be seen that stealing is largely confined to the ages of 10–13, that the 6–7 year olds are aggressive, and the 5's and under nervous.

XI. Intelligence

The distribution of the I.Q.'s is reasonably close to normal, but the variations of the symptoms with intelligence is interesting; these are shown in Table 9.

Table 9

Symptom	I.Q. −70	71–90	91–110	111–120	120+	Total	Average I.Q.
Group 1. Delinquent	1	6	15	1	3	26	97
Group 2. Aggressive	—	8	14	3	3	28	98
Group 3. Nervous	—	7	19	9	4	39	102
Group 4. Backward	3	5	3	2	—	13	88
Total	4	26	51	15	10	106*	

* 6 children not tested.

Though statistically there may be no significance between the average I.Q.'s, it will be seen that the nervous children obtain on the average the highest scores on intelligence tests; that the delinquents score, on the average, less than those who are aggressive; and that backwardness is not wholly due to psychological difficulties.

XII. Summary

1. An analysis is made of some of the data regarding 112 children who were referred to the Cambridge Child Guidance Clinic during 14 months and of some of the environmental influences. There were 81 boys to 31 girls, whereas the adult proportions of psychotics and psycho-neurotics are about 2 men to 3 women.

2. The distribution of the I.Q.'s is approximately normal.

3. The symptoms are divided into four groups: Delinquent, Aggressive, Nervous, Backward; the homes into Accord, Discord (where the parents quarrel), One parent dead, Other broken homes (divorce, desertion, etc.). Proportionately more girls come from Accord homes and boys from Other broken homes.

4. The most difficult ages are 10 and 11. Delinquency is largely confined to the ages 10–13; 21 out of 27 cases are in these age groups.

5. Nervous symptoms are largely correlated with Accord homes and delinquency with Other broken homes. There is some evidence for the surmise that the child who is referred to the clinic from the Accord home is liable to have been overprotected. Lack of affection is connected with the same symptoms. In an Accord home it goes with nervous symptoms, and in the Other broken homes with stealing.

6. The largest proportion of 'only' children is found in the Other broken homes class, the Discord home being a close second. The lowest proportion is found in the Accord home.

7. Sibling jealousy is confined almost entirely to Accord homes. With boys jealousy is connected with delinquency and aggression; with girls with nervousness and backwardness.

8. Inadequate or improper discipline is found in over 66% of the cases. In the Accord home it is connected with nervousness and in the broken home with delinquency.

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TYPES OF LEARNING IN INSECTS AND OTHER ARTHROPODS

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PART III

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Addenda (p. 69). *Summary* (pp. 69–70). *References* (pp. 71–76).

VIII. Imprinting

Those acquainted with the literature of bird behaviour will remember that Lorenz (1935, 1937), following on the work of Whitman and of Heinroth, has emphasized the fact that besides conditioning in the broad sense, there is found among birds a very peculiar type of acquiring process. This process he called 'Prägung'; translating it into English by the term 'Imprinting'. Imprinting, which differs in some respects from associative learning, results in the acquisition of the biologically 'right' object of social reactions by conditioning them, not to one fellow member of the species, but to the species pattern as such. It is rendered necessary by the somewhat surprising fact that many birds, in contrast it seems to the majority of other animals,[1] do not recognize their own species instinctively, but must be appropriately 'conditioned' in early life. Imprinting clearly does not fall neatly into any of the categories of learning already discussed, although it has affinities with both habituation and latent learning.

Where the species is characterized by some fairly simple and striking combination of characters (e.g. a simple contrasting pattern of two or three colours as in the wing pattern of ducks) the recognition of the species is often instinctive or inborn. Where such a *simple* specific pattern is lacking the hereditary mechanism for recognition seems to fail and the instinctive recognition is completed or replaced by the imprinting process. Imprinting appears thus to be a type of learning which either completes a complex instinct—being as it were a final method of fine adjustment of an instinct not yet completely stereotyped—or replaces the instinctive response altogether.

Imprinting, as defined by Lorenz, is peculiar in the following respects:

(1) The process is confined to a very definite and usually very brief period of the individual life, following shortly on emergence from the egg. As a result the young bird comes to accept as its proper companion, exemplifying the species, the first relatively large moving object it perceives, i.e. in normal circumstances its parent.

(2) The process once accomplished is very stable if not totally irreversible; so that for the rest of its life the bird's reactions *appear* purely instinctive.

(3) The process is often completed long before the various specific reactions to which the imprinted pattern will ultimately become linked, have been established.

(4) Imprinting, established as a result of the parental contact, will, like a human sexual fixation, irreversibly determine the conditions which, more than a year later, will release

[1] Note, however, that a phenomenon somewhat similar to imprinting appears to occur in certain fish (Noble, 1938).

the copulating reactions in the mature bird. In respect of this delayed effect the phenomenon shows a marked similarity to latent learning.

Now what evidence is there for any type of imprinting among the insects? In this respect the parallel between the learning of the two groups is first suggested by the pre-imaginal olfactory conditioning of insects in which influences operating *solely* during the larval life have been shown to exert an effect on the behaviour of the adult (Thorpe (1939) and Cushing (1941*a*) on *Drosophila*), although it must be remembered that here we are dealing, not as in birds, with a response to an elaborate environmental pattern but only an habituation to a relatively simple stimulus. Among ants the work of Fielde (1904) has shown that there are cases of olfactory conditioning (habituation?) where, if her observations are reliable, the effect is of such long duration that it can be described as 'irreversible', thus agreeing with attribute No. 2 above.

But besides these cases of olfactory learning there are one or two other examples among insects which, in that they concern responses to complex stimuli, seem to have a closer affinity to the imprinting of birds. Regen (1926), investigating the discriminative ability in regard to sounds of the grasshopper *Thamnotrizon apterus*, found that males which had just entered on adult life and had never heard the normal chirping of the species, could be induced to sing in rhythmic alternation with artificially generated sounds over an enormous frequency range. Those adults, however, which had already learnt to sing in concert with their brethren immediately detected any attempt at imposture and were reduced to silence no matter how closely (by human criteria) the artificial sounds approximated to the natural song.

Unfortunately the account of these extraordinarily interesting observations does not give us the necessary data to decide whether we have here a true case of imprinting or whether the effect is merely due to the gradual development or maturation of an instinct during the life of the individual. What we need to know is whether males not exposed to the chirps of other males retain their generalized response or not.

IX. Locality imprinting

It may perhaps be permissible to extend the original definition of imprinting to cover the possibility of attachment not to a living object but to the immediate locality first perceived by the newly emerged organism, so that this particular area becomes by a similar process the future breeding quarters of the individual. Here it is true we are on ground far less secure; yet such a possibility is particularly suggested by a number of observations on the behaviour of solitary bees and wasps—all insects with very remarkably developed powers of vision and homing orientation (see Part II of this paper).

Thus P. and N. Rau (1918), P. Rau (1934), writing on the localization of colonies of Bembecine wasps, say: "The persistence with which Bembix adhere to the one location which we have watched year after year is astonishing. Truly their dissemination seems to be *nil*. Here the wasps of our particular colony have had at their disposal a pasture equal in size to six city blocks in which to choose their nesting site, yet year after year[1] they limit themselves strictly to two distinct corners of a 'base-ball diamond', in the middle of this field. The fact that each successive generation should show the same choice and the same persistence [in spite of interference from disturbance by baseball players] is

[1] Observations of a single colony over 20 years (P. Rau, 1934).

all the more astonishing. In another vacant lot a mile away was another colony which, to our knowledge, persisted in like manner on a small area for three years [until their extermination by the erection of a building]—although just across the road from the lot was a large tract of vacant land thoroughly suitable to their needs." From the accounts of the Raus, Peckhams and many others there seems to be no evidence whatever that the limited distribution has any ecological basis; it seems extremely probable that other parts of the field where the colony was situated would have served as well. This extraordinary restriction suggests therefore that the result of the first locality study of the newly emerged *Bembix* becomes imprinted with great force with the result that the spot is 'home' for the individual for all purposes for the rest of its life. Before, however, we can accept this hypothesis we must bear in mind the gregarious instinct of this genus which may possibly, if all emerge at the same date, itself be the basis for their topographical conservatism.

Another point which emerges from the work of Parker (1917) is the possibility that, in apparent contradistinction to the condition obtaining in the majority of solitary wasps, odour plays an important part in the Bembecine's finding of its own skilfully concealed burrow. If this is so it is at least conceivable that odour should also be responsible for colony localization year after year.

But although the Bembecines provide the most striking example of this topographical conservatism there are many other solitary bees and wasps and perhaps some social wasps (e.g. *Polistes*) which seem more or less strongly attached to the place where their mother nested[1] and where their first locality study was made. Thus Perkins (1919), writing of very dense colonies of the solitary bee *Andrena cineraria*, says: "I suspect the colonising is due sometimes to a natural sociability of the species *or a reluctance to depart from their immediate birthplace*" (italics mine). He records a colony probably originally started by a single female, which steadily increased in size and became permanently a large one. Some of these colonies persist for many years. Thus one colony at Wotton-under-Edge, Gloucestershire, was kept under observation for nearly 40 years (1876–1914). It may indeed have existed for centuries for no other colony of the bee had ever been observed in the district.

The *Polistes* wasps are insects which form small hanging carton nests in the tropical, subtropical and south temperate regions of the Old and New Worlds. *Polistes annularis* and *P. pallipes* are two species found in temperate North America, the young queens hibernating in suitable shelter often some distance from the locality in which they were 'born' but returning in the spring to the immediate vicinity of the old nests to found new colonies. Of these P. Rau (1929*b*) writes: "Certain spots are their favourite sites and year after year they nest in certain buildings while other sites which seem just as good are ignored by them." In some cases they may be attracted to the stumps left after the old nests have been removed but this cannot be the explanation in all cases and in certain instances at least it seems that "the queens remember and return to the region of the old nest site when the time comes for establishing a new home". On the other hand, it must not be thought that this behaviour is invariable, even with *Polistes*, for the observations of Molitor (1939) on an unnamed European species of *Polistes* have shown that this is certainly not so under all circumstances.

[1] Dr O. W. Richards, who has an exceptionally wide experience of the habits of the Aculeate Hymenoptera, tells me that his impression is that this is the general rule.

Before leaving this subject a final word of caution is necessary. While the circumstantial evidence for a locality imprinting among a great many of these aculeate Hymenoptera is very remarkable we must remember that other insects sometimes show striking locality restrictions under conditions which preclude imprinting. Thus the cluster fly, *Pollenia rudis*, may occur in a particular room or under one particular eave of a house year after year (D. Keilin, personal communication) but the possibility of imprinting seems ruled out by the fact that the insect is in its early stages parasitic in earthworms of the genus *Allolobophora*. Similarly, the annual swarms of *Danaias plexippus* on the famous 'butterfly trees' of California are composed of an entirely new migratory influx every year so that none of the insects has had any previous experience of the locality. While the locality restrictions of the Hymenoptera then are very suggestive of imprinting, in no case has all other basis for the phenomenon been ruled out. We must therefore regard these examples as indicative of the need for further research rather than as satisfactory evidence of the phenomenon.

Addenda

I. Since Part II of this paper went to the press I have had the opportunity to observe closely in the field the exploratory behaviour of *Ammophila sabulosa*. From these preliminary observations I feel convinced that conclusive evidence as to the existence of true insight learning in the orientation behaviour of this genus will hardly be obtainable unless it is found possible to study the insect in captivity under controlled yet fairly natural conditions—no easy task. I was impressed by the fact that in addition to the orientation flights there is rapid exploration on foot—the insect running incessantly round and about, hither and thither, under and over twigs, leaves and brushwood. This constant investigation of the locality on foot must be borne in mind and its extent determined, before assuming that the insect when dragging its caterpillar relies solely on its occasional aerial surveys for maintaining direction and avoiding obstacles.

II. Since Part II of this paper was written P. Rau (1943, *Ann. Ent. Soc. Amer.* xxxvi, 221–6) has described how the cockroach (*P. americana*), during egg laying, shows the ability to adapt learned and instinctive behaviour to new situations, and apparently to "understand" situations. Interesting as are his observations they do not appear to provide any clear proof of insight learning in the sense employed in this review.

Summary

1. The different categories of learning are defined in the introduction in relation to taxes and instincts. They are habituation, associative learning (including conditioning and trial and error learning), latent learning (with 'selection'), insight learning and imprinting.

2. It is shown that habituation is a ubiquitous phenomenon, probably to be found in all Arthropoda. A few representative cases are described among insects where it is of far-reaching importance. In particular the significance of habituation in accounting for many characteristic phenomena of the behaviour of ants and other social Hymenoptera is stressed.

3. The relation of the conditioned reflex to simple types of learning is considered and it is shown that simple conditioning and the simpler types of trial-and-error learning are probably characteristic of insects in general and are found in many other arthropods.

The more complex types of trial-and-error learning as exemplified by the learning of elaborate mazes by cockroaches and ants are discussed.

4. The equivalence of certain types of learning among insects to the 'latent learning' of vertebrates is discussed. It is concluded that certain results with *Nemeritis* connote latent learning, and this process is considered in relation to the phenomena of 'exploration', 'selection' and 'attention'. It is shown that the more highly developed examples of homing behaviour in insects must almost certainly involve powers of exploration and subsequent selection from an environmental pattern learned as a whole; a performance essentially equivalent to latent learning. Latent learning may be evidence of insight as an outcome of a learning process but such insight is not adequate to produce a sudden adaptive response to a new situation and therefore must be sharply distinguished from 'insight learning'.

5. The evidence for the existence of true insight learning among insects is critically examined. It is concluded that while phenomena of orientation, nest building and provisioning and the use of tools, particularly among the Sphecoidea, give striking support for the theories of 'hormic psychology', they do not provide evidence for insight learning. Nevertheless, it is admitted that further investigation of the orientation and tool using of the various species of *Ammophila* and other Sphegidae may well show them to provide examples of insight learning although the present evidence is inconclusive. It is not conceded that the records of experiments and observations with ants and termites necessarily connote insight learning.

6. It is accepted that the facts of nest repair among the Eumenidae do provide, as far as can be judged from the published accounts, very striking *prima facie* evidence for insight learning. Nevertheless even here it is considered we do not yet know enough of the normal biology of the forms concerned to warrant us regarding these examples as furnishing final proof for insight learning.

7. The remarkable process of imprinting found among birds is discussed. What perhaps may be instances of a very similar process among insects (Orthoptera and Hymenoptera) are described. It is suggested that imprinting of a kind may well prove to be much commoner among insects than at present appears. The possibility of 'locality imprinting' is discussed.

In the preparation of a paper such as this, general discussion with colleagues and friends plays such a large part and extends over such a long period that it is impossible to acknowledge adequately all the assistance that one has received. Nevertheless, not being a psychologist by training, I have been particularly dependent on help and advice in this field. Without wishing to saddle them with responsibility for the views expressed, I would like particularly to thank Prof. Morris Ginsberg, Dr R. Thouless and Mr G. C. Grindley for their readiness to give me the benefit of their special knowledge. I have also profited greatly by discussion with Dr Mathilde Hertz, who combines in an unusual manner wide practical experience in training insects with a profound knowledge of the work and viewpoint of the Gestalt psychologists. To Dr A. D. Imms, F.R.S., and to my friend Edward Armstrong I am indebted for some valuable suggestions.

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Extensive bibliographies for further reference will be found in the text-books of C. Schröder, Fraenkel and Gunn and Warden, Jenkins and Warner listed above.

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PUBLICATIONS RECENTLY RECEIVED

The Structure of Morale. By J. T. MacCurdy. Cambridge University Press. 1943. Pp. 224. 8*s*. 6*d*. net.

There is obviously room for a clearly written, scientifically founded book on the subject of morale with which we are all more or less concerned practically. Dr MacCurdy's book sufficiently fulfils both conditions and there seems every reason for hoping that it will be widely read.

The problems of fear and morale are discussed in the earlier chapters. It is pointed out that those affected by a bomb explosion fall into three classes: (*a*) the dead, (*b*) the near misses, and (*c*) the remote misses. Of these, the third group are inclined to become habituated to the bombs and to feel reduced fear or none at all. In time, they will develop the conviction that though others may be hit, they are immune from danger. The second group will be the only one whose fear will be reinforced and who may thus contribute to reduced morale. The total effect will generally be to improve morale if (as usually happens) the numbers in the third group are much greater than those of the other groups. Morale, on the other hand, may be expected to be most effectively undermined by air-raids which create as large a proportion as possible of near misses. This will, for example, happen in intensive raids on a small area and not in slighter air attacks distributed over a wide area. All of which, as Dr MacCurdy points out, may be understood if we regard fear as a conditioned emotional reaction following the known principles of conditioned reaction formation and extinction.

The book ranges widely over many topics less closely connected with morale. There is no reason why it should not. The book is based on lectures given to officers and to members of the A.T.S., and the range of these lectures was originally determined by the interests of the persons to whom the lectures were given. These interests seem very naturally to have included such topics as British rule over India, the rise of socialism and pacifism after the last war, the public schools, and the opinion of the British working classes of the value of an aristocratic class. To a reviewer whose political prejudices are not altogether those of the author it seems that what Dr MacCurdy has to say on many of these topics is often determined more by his political opinions than by his psychological insight. It would, however, be unreasonable to expect to agree with all of a book which treats so many controversial matters as this. It has been said that truth comes more easily from error than from confusion. Dr MacCurdy may be sometimes in error, but what he has to say he says clearly. Where he does not carry conviction, he provokes thought.

Of the parts of Dr MacCurdy's book less closely connected with the central problem of morale (although still bearing on it), probably different readers would make different choices of the sections of greatest interest. My own choice is of the part dealing with large social organizations. Dr MacCurdy analyses the causes of inflexibility and inefficiency in such social organizations as an army, a big business, or a government department. He shows that some of these faults are inherent in the system itself and suggests that their effects may be minimized by insight into their origin, while others are due to the undue scope given in a hierarchical social system for motivation of a type which promotes personal or departmental ends and does not aim at the ultimate ends for which the organization exists. Thus an officer in the army may be resistant to a necessary change because that is the safest way to secure the approval of his seniors, but also he may find that, if he tries to secure what he believes to be a necessary change, there seems to be something in the army system which opposes him and delays or thwarts the desired end. For this opposition he may be tempted to blame individuals rather than the size of the system, or to make the vague charge of obstruction by 'red tape'. Dr MacCurdy points out, however, that such results are almost certain to follow from the fact that the army is so large that those responsible for change cannot deal personally with all the suggestions that come to them and that these pass through a filter of subordinates whose job is not to determine policy but to interpret regulations.

The aim of a large social organization—to have the activities of all its parts directed towards a common end—can only be achieved by the co-ordination of the activities of the parts. This co-ordination is partly achieved by a hierarchical structure of the organization so that each section has its own chiefs who have a smaller number of superior officers, until the structure culminates in a single supreme authority; partly co-ordination comes about by liaison between the different sections. Efficient liaison may overcome some of the defects of the hierarchical organization but at the cost of much increased personnel and much increased employment of paper. By an interesting analogy with the number of possible interconnexions between the 9000 million cells in the cerebral cortex (in which an arithmetical mistake in no way affects the argument), Dr MacCurdy suggests that a social organization as adaptable as the human brain might require an equally complex liaison system. If the muscle fibres are compared to soldiers in the field, this would correspond to a system of twenty-six staff officers to each soldier in the field. Relative inflexibility is to be expected if we reflect that every social organization falls incomparably short of this complexity of liaison.

Dr MacCurdy suggests that exasperation at the defects of war time social organizations is one of the factors which threaten morale. If we understand the social psychological origins of the faults, we may cease to be exasperated by them and may even see how steps may be taken in the direction of their cure.

R. H. T.

War and the Psychological Conditions of Peace. By WILLIAM BROWN. London: A. and C. Black. 1942. Pp. viii + 144. 7*s.* 6*d.* net.

Within the last few years, psychologists have shown a praiseworthy determination to forsake their 'ivory tower' and devote their attention to the social behaviour of individuals and groups. But they have also been somewhat too ready to claim that the knowledge gained from their psychological studies has enabled them to solve problems and give advice in situations which they have no more than begun to understand. It is true that they, and Dr William Brown in particular, have done good service in emphasizing the paramount importance of unconscious mental processes in determining the course of human behaviour in group, as well as in individual, life. It is easier, however, to trace the part played in past events by such processes than to predict the course they will take in future, when attitudes and behaviour will almost certainly be different in some respects. Thus doubtless the 'belligerency' produced by the projection of unconscious aggressiveness, which Dr Brown comments on, was an important factor in this country in the *last* war; but nowadays we seem rather to be too much concerned with looking forward to "the era in which we shall have built Jerusalem in England's smooth and asphalt land", as Max Beerbohm has put it.

Again, if the unconscious aggressiveness and inferiority of the Germans (I do not see why Dr Brown should deny the co-existence of *conscious* superiority and *unconscious* inferiority) expresses itself in a peculiarly violent and anti-social type of behaviour, why should this be so, and how can it best be met? Medical psychologists may be able to deal with these outbursts in their individual patients; do they yet know any more than historians, economists and journalists about their cause and treatment in the behaviour of nations? No doubt it is desirable that such matters should be studied and discussed by psychologists; but with a good deal of wariness before they pass on their conclusions to the general public.

Dr William Brown has in this book republished his earlier *War and Peace*, published in 1939, and has added three chapters written since the outbreak of war. It is interesting to compare the two sets of views, which not unnaturally show some disagreement.

Dynamics in Psychology. By WOLFGANG KOEHLER. London: Faber and Faber, Ltd. 1942. Pp. 120. 8*s.* 6*d.* net.

The three lectures which constitute this book give a very readable exposition of the 'field' theory of the Gestalt psychologists. Prof. Koehler has become less polemical and more persuasive, with the consequence that his argument is much easier to follow. He seems to claim less than did Prof. Koffka, for instance, in his *Principles*; and therefore to be more readily acceptable. Moreover, the experimental data—some old, but some new and just as ingenious as the old—which he uses to demonstrate the principle of isomorphism are well selected and arranged to show how that principle can be used to relate and explain phenomena of perception and memory which at first sight appear quite unconnected; and to suggest new lines of experimental approach. Yet on the other hand the old doubt persists, that our knowledge of the physiological mechanisms and functions of the nervous system—still more of physical phenomena—can help us in explaining and predicting psychological phenomena only if we are ready to set aside the innumerable modifications and variations introduced by the subjective factors which, as Prof. Koehler admits, "may interfere with [the] operation [of autochthonous principles in perceptual organization]".

Nevertheless it is excellent that Prof. Koehler still carries on that vitally important line of psychological discovery which was initiated by him and his colleagues of the Gestalt school.

An Anatomy of Inspiration. By ROSAMOND E. M. HARDING. With an Appendix on *The Birth of a Poem* by ROBERT B. M. NICHOLS. Cambridge: W. Heffer and Sons, Ltd. 1942. Pp. xiii + 145. 7*s.* 6*d.* net.

Dr Harding is to be congratulated on the publication of a second edition of her book. It contains a great deal of very valuable and interesting data on the origin of creative thought and imagination, and shows clearly what are the predisposing conditions for their development and functioning. Moreover, she is able to integrate these data along the lines of the theory she has already propounded in *Towards a Law of Creative Thought*, of the interaction between "fringe ideas" belonging to different spheres of interest; and of the impinging of some external factor upon these ideas to produce the flash of inspiration. It is a matter of the greatest interest to psychologists to study the mental levels or states of consciousness at which these processes occur. Here Dr Harding is not unnaturally somewhat indefinite. But her thesis is greatly assisted by the brilliant account given in an Appendix by Robert Nichols of the mental processes occurring in the 'Birth of a Poem'. This describes with extraordinary aptness the interchange between two parts of the self—"I" and "the artificer"—as they discuss and hammer out the poetic ideas which well up from the deeper unconscious levels—this discussion being interspersed with a "surfacing" of "I" to the ordinary everyday "prose" world. We are most of us familiar with this kind of subconscious argument; but here it is personified unusually clearly; and it scarcely fits in with the Freudian wrangles between the ego and the super-ego.

It is to be hoped that Dr Harding herself, or some other psychologist, may work out further studies of the interplay between the variously functioning selves.

The Mental Growth of Children from Two to Fourteen Years. By FLORENCE L. GOODENOUGH and KATHARINE M. MAURER. Minneapolis: The University of Minnesota Press (London: Humphrey Milford). 1942. Pp. xv+130. 15*s.* 6*d.* net.

This book describes first the preparation of new scales of verbal and non-verbal intelligence tests, each with alternative scales, for pre-school children aged 2–5 years. The verbal scales contained 80 items each, the non-verbal, 55. The items were selected from the Stanford-Binet, Kuhlmann's revision, Goodenough's revision, the Merrill-Palmer scale, etc.; they were chosen according to (1) the extent to which they differentiated between children known to be of different intelligence, (2) their objectivity of scoring, (3) their interest for children, (4) their difference from each other. For standardization, groups of 100 children were chosen for each half-year of age, and selected for socio-economic status according to the frequency of various types of socio-economic status in the general (urban) population. Standardization of the scores was carefully carried out in 'I.Q. equivalents'.

The second part of the book deals with the testing, re-testing and follow-up over a twelve-year period of about 500 children. The main result that emerged was that although re-tests of children aged 3–4 years after periods up to one year showed a fair reliability, yet even then the average shift was 10 I.Q. points, and shifts of 20 points were not uncommon. Prediction of mental status at later periods, up to the time of college entrance, was extremely uncertain. Nevertheless, characteristic sex differences emerged at very early ages, and also differences between those who excelled on the verbal scales, and those who excelled on the non-verbal.

One would like to know if there were any consistent relationships between the type of fluctuation or shift in mental development as demonstrated by the test results, and the children's personality characteristics. It is to be hoped that the authors will continue their valuable investigations to include the study of such qualitative relationships, and thus throw more light on individual differences in mental development.

Speech and Voice—Their Evolution, Pathology and Therapy. By LEOPOLD STEIN. London: Methuen and Co., Ltd. 1942. Pp. xii+233. 15*s.* net.

This excellent though somewhat uneven book is by Dr Stein, who has gained an international reputation as Director of the Speech Department of the Policlinic, Vienna. It is excellent in its dealing with speech, and inadequate in its dealing with voice.

Dr Stein regards speech and voice disorders as the outcome of the disintegration of the personality—a regression to a lower level and the adoption of earlier types of speech. Granting this, it follows that in diagnosing speech defects, the main task is to determine the extent of the regression, for then only can appropriate methods of treatment based on sound psychological and physiological principles be applied. He therefore devotes considerable space to the study of the evolution and development of language and speech, and proceeds to analyse and to discuss the various speech disorders and especially cluttering, stammering and dyslalia. This is well done, and should be read and studied by all who are interested in speech disorders.

When the second edition of this work is being prepared, it is suggested that careful diagrams, illustrating the description of the nervous system, be given; that the Bibliography include the books mentioned in the text, and that references not be made to *loc. cit.*, for the reader is annoyed if he turns up the incorrect reference; that all definitions be checked, e.g. the definition and description of *Myasthenia gravis* in the glossary is wrong; and that contact be made with more recent views than James's regarding the "great, blooming, buzzing confusion of the baby's world" (page 28).

One wonders how long it will be before the electroencephalogram is used in the study of speech disorders. It would seem to open out a wide field for research. H. B.

Intelligence in Mental Disorder. By ANN ROE and DAVID SHAKOW. Annals of the New York Academy of Sciences, Vol. XLII, Art. 4. 1942. Pp. 361–490.

The material for this study is drawn from an analysis of the results of Stanford-Binet (1916 version) examinations given to 827 patients at the Worcester State Hospital. The usual diagnostic criteria were employed to group the subjects into their various types of abnormality. A welcome innovation is the division of subjects into "representative" and "non-representative" groups. "Factors affecting representativeness as the term is used by us, are: effort, interest, confidence (as contrasted with), temporary psychotic episodes, or emotional disturbances, physical illness or poor test conditions." Comparisons with normal groups are made with representative subjects, the non-representative groups being used only for comparison with representative groups of the same diagnostic classifications. Details are set forth very clearly for all the main types of mental disorder studied. It is shown that the differences between normal and abnormal representative groups are larger and more numerous than those between representative and non-representative, but that they follow the same lines. Most psychotic and psychopathic groups show a general lowering of intellectual performance as compared with normal groups, with a selective special lowering in certain test items.

The detailed analysis of the results achieved is deeply interesting and ought to be very carefully and

widely studied. Only one or two main points can be mentioned here. It looks fairly clear that the view that original level of intelligence determines in any substantial part the type of psychosis suffered demands extremely critical study. Even the paranoid group shows a very wide dispersal of intelligence. Again, "vocabulary is less affected in general than the other tests in all groups". This is particularly interesting in view of a strong tendency to lay great emphasis upon vocabulary tests for diagnostic purposes in this country. The practice obviously requires revision. The authors find repetition of digits forward the most significant single test. The other items primarily affected are conceptual thinking and immediate memory. Variability is greater, especially in the *dementia praecox* groups.

The monograph is a significant contribution to a highly controversial but exceedingly important topic. It describes a well-planned and well-executed research, and should stimulate further work in the same field.

Mental Illness: A Guide for the Family. By EDITH M. STERN, with the collaboration of SAMUEL W. HAMILTON. New York: the Commonwealth Fund (London: Humphrey Milford). 1942. Pp. xvii+134. 6*s.* net.

This book provides a simple and non-technical guide for the friends and relations of those suffering from mental illness which is possibly certifiable, as to the best methods of dealing with such cases; the procedure of hospitalization and the attitude towards the hospitalized patient; and the after care of the discharged patient.

In so far as it inculcates a healthier attitude to and treatment of mental patients, the book can do nothing but good. But since it was written and published in the U.S.A., the details of procedure and official regulations apply only to that country. It would nevertheless be valuable to have a pamphlet of this kind (containing a fraction of the paper and issued at about one-sixth of the cost) including a description of the procedure and regulations in force in this country for dealing with mental cases; and also the advice and recommendations, which appear sane and helpful.

A Bibliography of Aviation Medicine. By E. C. HOFF and J. F. FULTON. Springfield, Illinois: Charles C. Thomas (Yale University) (London: Baillière, Tindall and Cox). 1942. Pp. xv+237. $4.00 net.

The American Committee of Aviation Medicine, Division of Medical Sciences, National Research Council, acting for the Committee on Medical Research, Office of Scientific Research and Development, who were responsible for the authorization of this volume, are to be warmly congratulated on the care and thoroughness with which they have carried out their task. Aviation Medicine is interpreted very widely, as indeed it should be, to cover all problems affecting the efficiency and well-being of flying personnel. The field is very well and clearly classified, 5736 titles are listed, and extremely adequate indexes are provided. Although it is certain that a large bulk of the work referred to will be regarded as elementary and out of date before long, so that the bibliography will require extensive supplementation, yet there was every reason for producing and publishing it now. Far more English-speaking people than ever before are at work upon all manner of human problems in aviation at the present time, and it will be of very great value to most of these to be able to turn up a reliable bibliography. Publications are included up to the end of May 1942. This bibliography ought to be made available in every centre of flying research.